4 Richard finds information from the internet about the most popular colours for cars in the UK in 2017

Table 1 gives this information.

Rank	Colour	Percentage of all cars (%)
1	Black	20.3
2	Grey	19.7
3	White	19.0
4	Blue	16.0
5	Silver	10.0
	Total	85.0

Table 1

(Source: *bbc.co.uk*)

(a) Explain why the information in Table 1 is secondary data.

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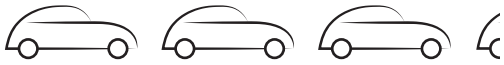
(1)

Richard drew this pictogram to represent his information about the most popular car colours.

Black	
Grey	
White	
Blue	
Silver	

(b) Complete this key for the pictogram.

Key  represents .....%

(1)

Jill says that a pictogram is not the most appropriate way to display Richard's information.

(c) Is Jill correct?
Give a reason for your answer.

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(2)

Richard decides to collect some data about car colours by recording the colour of each of the 60 cars in a car park.

Table 2 gives information about his results.

Car colour	Frequency
Black	10
Grey	17
White	6
Blue	19
Silver	8

Table 2

The modal car colour from Table 2 is blue.

(d) Explain whether or not blue is the expected modal car colour based on the information in Table 1

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(2)

(e) Explain why, for the information in Table 2, the mode is the most appropriate average to use.

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(1)

(f) Using the information in Table 1 and Table 2, compare the number of silver cars in the car park with the expected number of silver cars in a car park with 60 cars.

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(3)

(Total for Question 4 is 10 marks)